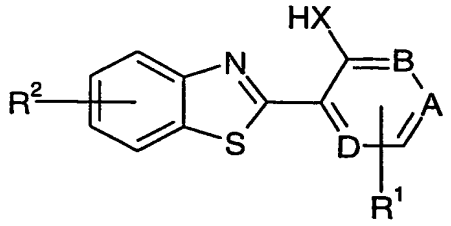
Claims

1. The use of a compound of formula (I)



(I)

wherein:

A and D independently represent CH or N; and

either B represents CH and X represents O;

or B represents N and X represents NH;

R^1 represents hydrogen, halogen, C1 to 6 alkyl, C1 to 6 alkoxy, aryl or benzyloxy; said aryl or benzyloxy group being optionally further substituted by a group selected from C1 to 6 alkyl, C1 to 6 alkoxy, halogen and carbomethoxy;

R^2 represents hydroxy, amino, C1 to 6 alkyl, C1 to 6 alkoxy, carbamoyl (-$CONR^3R^4$) or –COOH; said alkyl or alkoxy group being optionally further substituted by one or more groups independently selected from hydroxy and NR^5R^6;

R^3, R^4, R^5 and R^6 each independently represent hydrogen or C1 to 6 alkyl; said alkyl group being optionally further substituted by one or more substituents selected independently from hydroxy, C1 to 6 alkoxy, NR^7R^8 and C1 to 6 alkoxycarbonyl;

or the group NR^3R^4 or the group NR^5R^6 may together represent a 5 to 7 membered azacyclic ring optionally incorporating one further heteroatom selected from O and NR^9;

R^7 and R^8 independently represent hydrogen or C1 to 6 alkyl; or the group NR^7R^8 together represents a 5 to 7 membered azacyclic ring optionally incorporating one further heteroatom selected from O and NR^9;

R^9 represents hydrogen or C1 to 6 alkyl; said alkyl group being optionally further substituted by C1 to 6 alkoxy;

or a pharmaceutically acceptable salts thereof, in the manufacture of a medicament for the treatment or prophylaxis of diseases or conditions in which inhibition of kinase Itk activity is beneficial.

2. The use according to Claim 1 of a compound of formula (I) or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for the treatment or prophylaxis of Th2-driven and/or mast cell-driven and/or basophil driven diseases or conditions.

3. The use according to Claim 2 wherein the disease is asthma.

4. The use according to Claim 2 wherein the disease is allergic rhinitis.

5. The use according to any one of Claims 1 to 4 wherein B in formula (I) represents CH and X represents O.

6. The use according to any one of Claims 1 to 5 wherein R^2 in formula (I) represents $-CONR^3R^4$ or R^2 represents C1 to 6 alkyl substituted by NR^5R^6.

7. The use according to any one of Claims 1 to 4 wherein the compound of formula (I) is:
2-(4-chloro-2-hydroxyphenyl)-1,3-benzothiazole-6-carboxylic acid;
2-(2-hydroxy-6-methoxyphenyl)-1,3-benzothiazole-6-carboxylic acid;
2-(2-hydroxy-5-methoxyphenyl)-1,3-benzothiazole-6-carboxylic acid;
2-(4-chloro-2-hydroxyphenyl)-N-[2-(dimethylamino)ethyl]-N-methyl-1,3-benzothiazole-6-carboxamide;
5-chloro-2-[6-(pyrrolidin-1-ylcarbonyl)-1,3-benzothiazol-2-yl]phenol;
2-(4-chloro-2-hydroxyphenyl)-N-(3-morpholin-4-ylpropyl)-1,3-benzothiazole-6-carboxamide;
2-(4-chloro-2-hydroxyphenyl)-N-(2-pyrrolidin-1-ylethyl)-1,3-benzothiazole-6-carboxamide;
5-chloro-2-(6-{[4-(2-methoxyethyl)piperazin-1-yl]carbonyl}-1,3-benzothiazol-2-yl)phenol;
2-(2-hydroxy-5-methoxyphenyl)-N-(3-morpholin-4-ylpropyl)-1,3-benzothiazole-6-carboxamide;
4-methoxy-2-[6-(pyrrolidin-1-ylcarbonyl)-1,3-benzothiazol-2-yl]phenol;
2-(5-bromo-2-hydroxyphenyl)-N-[2-(dimethylamino)ethyl]-N-methyl-1,3-benzothiazole-6-carboxamide;
4-fluoro-2-[6-(pyrrolidin-1-ylcarbonyl)-1,3-benzothiazol-2-yl]phenol;
5-methoxy-2-[6-(pyrrolidin-1-ylcarbonyl)-1,3-benzothiazol-2-yl]phenol;
methyl N-{[2-(2-hydroxyphenyl)-1,3-benzothiazol-6-yl]carbonyl}serinate;
2-[6-(pyrrolidin-1-ylcarbonyl)-1,3-benzothiazol-2-yl]phenol;
2-(5-chloro-2-hydroxyphenyl)-N-(3-morpholin-4-ylpropyl)-1,3-benzothiazole-6-carboxamide;
3-methoxy-2-[6-(pyrrolidin-1-ylcarbonyl)-1,3-benzothiazol-2-yl]phenol;
N,N-diethyl-2-(2-hydroxy-4-methoxyphenyl)-1,3-benzothiazole-6-carboxamide;
N-[2-hydroxy-1-(hydroxymethyl)ethyl]-2-(2-hydroxy-4-methoxyphenyl)-1,3-benzothiazole-6-carboxamide;
2-[6-(pyrrolidin-1-ylcarbonyl)-1,3-benzothiazol-2-yl]pyridin-3-ol;
methyl 4-{[2-(6-{[[2-(dimethylamino)ethyl](methyl)amino]carbonyl}-1,3-benzothiazol-2-yl)-3-hydroxyphenoxy]methyl}benzoate;

5-ethoxy-4-[6-(pyrrolidin-1-ylcarbonyl)-1,3-benzothiazol-2-yl]pyridin-3-ol;

N-[2-(dimethylamino)ethyl]-2-(4-hydroxy-1,1'-biphenyl-3-yl)-N-methyl-1,3-benzothiazole-6-carboxamide;

N-[2-(dimethylamino)ethyl]-2-(4-hydroxy-3'-methoxy-1,1'-biphenyl-3-yl)-N-methyl-1,3-benzothiazole-6-carboxamide;

5-chloro-2-(6-{[[2-(dimethylamino)ethyl](methyl)amino]methyl}-1,3-benzothiazol-2-yl)phenol;

5-chloro-2-(6-{[4-(2-methoxyethyl)piperazin-1-yl]methyl}-1,3-benzothiazol-2-yl)phenol;

5-chloro-2-[6-(pyrrolidin-1-ylmethyl)-1,3-benzothiazol-2-yl]phenol;

4-fluoro-2-[6-(pyrrolidin-1-ylmethyl)-1,3-benzothiazol-2-yl]phenol;

2-[6-(pyrrolidin-1-ylmethyl)-1,3-benzothiazol-2-yl]phenol;

3-methoxy-2-[6-(pyrrolidin-1-ylmethyl)-1,3-benzothiazol-2-yl]phenol;

4-methoxy-2-[6-(pyrrolidin-1-ylmethyl)-1,3-benzothiazol-2-yl]phenol;

4-bromo-2-[6-(pyrrolidin-1-ylmethyl)-1,3-benzothiazol-2-yl]phenol;

5-methoxy-2-[6-(pyrrolidin-1-ylmethyl)-1,3-benzothiazol-2-yl]phenol;

4-chloro-2-[6-(pyrrolidin-1-ylmethyl)-1,3-benzothiazol-2-yl]phenol;

2-{6-[(diethylamino)methyl]-1,3-benzothiazol-2-yl}-5-methoxyphenol;

5-ethoxy-4-[6-(pyrrolidin-1-ylmethyl)-1,3-benzothiazol-2-yl]pyridin-3-ol;

4-chloro-2-(6-{[(3-morpholin-4-ylpropyl)amino]methyl}-1,3-benzothiazol-2-yl)phenol;

2-[6-(pyrrolidin-1-ylmethyl)-1,3-benzothiazol-2-yl]pyridin-3-ol;

2-[5-(pyrrolidin-1-ylmethyl)-1,3-benzothiazol-2-yl]phenol;

5-chloro-2-[6-(piperidin-1-ylmethyl)-1,3-benzothiazol-2-yl]phenol;

5-chloro-2-[6-(4-methylpiperazin-1-ylmethyl)-1,3-benzothiazol-2-yl]phenol;

5-chloro-2-{6-[(diethylamino)methyl]-1,3-benzothiazol-2-yl}phenol;

5-chloro-2-{6-[(dimethylamino)methyl]-1,3-benzothiazol-2-yl}phenol;

2-[6-(hydroxymethyl)-1,3-benzothiazol-2-yl]phenol;

2-(6-amino-1,3-benzothiazol-2-yl)-4-methoxyphenol;

N,N-dimethyl-2-(2-hydroxy-4-methoxyphenyl)-1,3-benzothiazole-6-carboxamide;

N,N-dimethyl-2-(2-hydroxyphenyl)-1,3-benzothiazole-6-carboxamide;

3-[6-(pyrrolidin-1-ylcarbonyl)-1,3-benzothiazol-2-yl]pyrazin-2-amine;

2-(4-chloro-2-hydroxyphenyl)-1,3-benzothiazol-6-ol;

5-chloro-2-[6-(2-hydroxy-3-pyrrolidin-1-yl-propoxy)-1,3-benzothiazol-2-yl]-phenol;

5-chloro-2-[5-(pyrrolidin-1-ylcarbonyl)-1,3-benzothiazol-2-yl]phenol;

2-[5-(pyrrolidin-1-ylcarbonyl)-1,3-benzothiazol-2-yl]phenol;

N,N-dimethyl-2-(2-hydroxyphenyl)-1,3-benzothiazole-5-carboxamide;

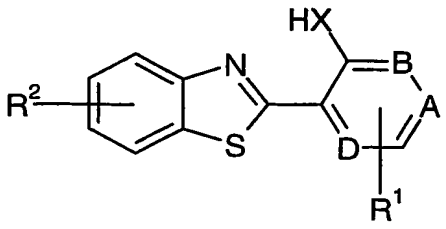
5-chloro-2-[5-(pyrrolidin-1-ylmethyl)-1,3-benzothiazol-2-yl]phenol;

2-{5-[(dimethylamino)methyl]-1,3-benzothiazol-2-yl}phenol;

2-(2-hydroxyphenyl)-N-(3-morpholin-4-ylpropyl)-1,3-benzothiazole-7-carboxamide;

or a pharmaceutically acceptable salt of any one thereof.

8. A compound of formula (Ia)



(Ia)

wherein:

A and D independently represent CH or N; and

either B represents CH and X represents O;

or B represents N and X represents NH;

R^1 represents hydrogen, halogen, C1 to 6 alkyl, C1 to 6 alkoxy, aryl or benzyloxy; said aryl or benzyloxy group being optionally further substituted by a group selected from C1 to 6 alkyl, C1 to 6 alkoxy, halogen and carbomethoxy;

R^2, which is attached to the 5- or 6-position of the benzothiazole ring, represents $CONR^3R^4$ or C1 to 6 alkyl or C1 to 6 alkoxy; said alkyl or alkoxy group being further substituted by one or more groups independently selected from hydroxy and NR^5R^6;

NR^3R^4 represents a 5 to 7 membered azacyclic ring optionally incorporating one further heteroatom selected from O and NR^9;

R^5 and R^6 each independently represent hydrogen or C1 to 6 alkyl; said alkyl group being optionally further substituted by one or more substituents selected independently from hydroxy, C1 to 6 alkoxy, NR^7R^8 and C1 to 6 alkoxycarbonyl;

or the group NR^5R^6 together represents a 5 to 7 membered azacyclic ring optionally incorporating one further heteroatom selected from O and NR^9;

R^7 and R^8 independently represent hydrogen or C1 to 6 alkyl; or the group NR^7R^8 together represents a 5 to 7 membered azacyclic ring optionally incorporating one further heteroatom selected from O and NR^9;

R^9 represents hydrogen or C1 to 6 alkyl; said alkyl group being optionally further substituted by C1 to 6 alkoxy;

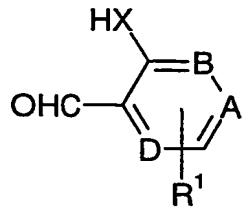
or a pharmaceutically acceptable salts thereof.

9. A compound of formula (Ia), according to Claim 8, for use as a medicament.

10. A pharmaceutical formulation comprising a compound of formula (Ia), as defined in Claim 8, or a pharmaceutically acceptable salt thereof, optionally in admixture with a pharmaceutically acceptable diluent or carrier.

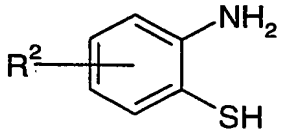
11. A process for the preparation of a compound of formula (Ia), as defined in Claim 8, and optical isomers, racemates and tautomers thereof and pharmaceutically acceptable salts thereof, which comprises:

(a) reaction of a compound of formula (II)



(II)

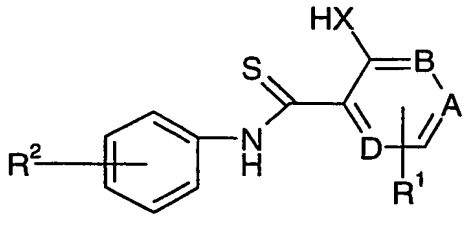
wherein R^1, A, B, D and X are as defined in Claim 8, with a compound of formula (III)



(III)

wherein R^2 is as defined in Claim 8; or

(b) oxidative cyclisation of a compound of formula (IV)



(IV)

wherein R^1, R^2, A, B, D and X are as defined in Claim 8;

and where desired or necessary converting the resultant compound of formula (Ia), or another salt thereof, into a pharmaceutically acceptable salt thereof; or converting one compound of formula (Ia) into another compound of formula (Ia); and where desired converting the resultant compound of formula (Ia) into an optical isomer thereof.